NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

TRANSITION TO ORGANIC PRODUCTION

(Acre)
CODE 789

DEFINITION

Utilizing agricultural management strategies while transitioning from conventional to organic production.

Organic production is a system that responds to site-specific conditions by integrating cultural, biological, and mechanical practices that foster cycling of resources, promote ecological balance, and conserve and enhance biodiversity.

PURPOSE

This interim practice is applied as part of a resource management system to minimize negative impacts of agricultural production on soil, water, air, plant, animal and human resources during the process of transitioning to organic production.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies wherever the farming operation (in whole or part) is transitioning to organic production.

CRITERIA

General Criteria for All Purposes

A transition to organic production plan shall be developed. This plan may be a component of an overall conservation plan or a stand alone transition to organic agriculture plan. All methods of transition to organic production must be integrated with other components of the conservation plan.

All methods of organic production must comply with Federal, State, and local regulations, including the Organic Food Production Act of 1990, as amended (7 U.S.C. 6501 et seq.), and regulations with the National Organic Program (NOP) final rule (7 CFR Part 205).

An appropriate set of mitigation techniques must be designed and implemented to minimize the risks of transition to organic production management activities in accordance with quality criteria in the local NRCS Field Office Technical Guide (FOTG). Mitigation techniques include practices such as buffer strips, filter strips and crop rotation, and management techniques such as application method and timing.

Additional Criteria to Protect Soil Resources

Any tillage and cultivation operations selected and implemented shall be managed to maintain or improve soil quality and limit soil loss to the minimum Quality Criteria according to the FOTG.

Additional Criteria to Protect Water Resources

Any tillage and cultivation operations selected and implemented shall be managed in conjunction with other sediment control practices, in order to minimize sediment losses to nearby surface water bodies.

Plant and animal materials shall be managed in a manner that does not contribute to contamination of water resources.

Livestock shall be managed to minimize impact to nearby groundwater and surface water bodies.

Greenhouse, orchard, and nursery operations shall be managed in order to minimize impact to nearby groundwater and surface water bodies.

Additional Criteria to Protect Air Resources

Clients shall pay special attention when using allowed synthetic substances for minimizing volatilization and drift that may impact non-target plants, animals and humans.

Clients shall pay special attention with transitional techniques to reduce the amount of dust and livestock odor that may impact the natural resources and surrounding community.

Additional Criteria to Protect Plant Resources

Clients shall pay special attention to substance label instructions including those directed at:

- Preventing misdirected pest management control measures that negatively impact plants.
- Appropriate climatic conditions, crop stage, soil moisture, soil pH, and soil organic matter in order to improve soil water holding capacity and ultimately plant health.
- Limiting substance residues in soil that can carry over and harm subsequent crops.

Additional Criteria to Protect Animal Resource

Clients shall pay special attention to label instructions that minimize negative impacts on animals.

Additional Criteria to Protect Humans

Clients shall pay special attention to substance label instructions that minimize negative impacts on humans. The label shall be followed when applying allowed pesticides.

CONSIDERATIONS

The following methods and principles should be considered:

- A healthy and biologically diverse soil should be the primary objective in attaining the goal of producing healthy crops. Reaching crop-specific soil pH levels and optimum macro- and micro-nutrient levels should be of highest priority.
- Increased soil organic matter levels will promote biological diversity (natural predators) as well as soil water holding capacity. Organic matter may be increased using a combination of reduced tillage, green manure/summer cover crops/ winter cover crops.
- Perennial and annual weeds should be mitigated using a combination of cultivation, mowing, mulching, green manure/summer cover crops, winter cover crops, livestock grazing, flaming or heat controls;
- Using "blind tillage" with a rotary hoe for 1-2 post-planting will reduce weed seedling populations yet will not damage the crop. For more information, refer to ATTRA's "Principles of Sustainable Weed Management for Croplands," listed in the references.
- Cultural management practices, as well as biological, botanical or mineral inputs may be used to control disease problems;
- Biological controls, development of habitat for natural enemies of pests, and lures, traps and repellants may be used to control pest problems.
- Allowed synthetic substances should be used judiciously in order to minimize environmental risk and pest resistance;
- Livestock management systems such as prescribed grazing and grass-based dairying can be used to improve overall herd health and to minimize the size and scale of a necessary waste management system.

PLANS AND SPECIFICATIONS

The transition to organic production plan shall be prepared in accordance with the criteria of this standard and in keeping with standards for individual system components and shall describe the requirements for applying the practice to achieve its intended purpose.

At a minimum, the transition to organic production plan shall include:

- Plan map and soil map showing all conventional, transitional, and organic acreage, field numbers and buffer zone locations, widths and descriptions (if applicable) separating organic/transitional acreage from non-organically managed adjacent areas;
- Description of all practices and procedures to be performed and

maintained, including the frequency with which they will be performed;

- On-farm and off-farm produced materials to be used as a production/handling input;
- Monitoring practices and procedures to be performed and maintained;
- Comprehensive record keeping system which will allow for the full documentation of activities and transactions undertaken by the producer per §205 of the National Organic Program final rule;
- Location of sensitive resources and setbacks, if applicable;
- Environmental risk analysis, with approved tools and/or procedures, for probable pest management recommendations by crop (if applicable) and pest;
- Interpretation of the environmental risk analysis and identification of appropriate mitigation practices and techniques;
- Operation and maintenance requirements.

Components. Components of a complete transition to organic production management system may include, but are not limited to the NRCS FOTG Practice Standards listed below. Where contradictions exist between a practice standard and the Federal Rule embodying the NOP, the NOP shall prevail.

- Composting Facility (317)
- Conservation Cover (327)
- Conservation Crop Rotation (328)
- Contour Buffer Strips (332)
- Contour Farming (330)
- Cover Crop (340)
- Critical Area Planting (342)
- Cross Wind Stripcropping (589B)
- Cross Wind Trap Strips (589C)
- Deep Tillage (324)
- Fence (382)
- Irrigation Storage Reservoir (436)
- Irrigation System-Sprinkler (442)
- Irrigation Water Conveyance (430)
- Irrigation Water Management (449)
- Mulching (484)
- Nutrient Management (590)
- Pasture and Hay Planting (512)
- Pest Management (595)
- Prescribed Burning (338)
- Prescribed Grazing (528)
- Residue Management, No-Till/Strip Till (329A)
- Residue Management, Mulch Till (329B)
- Residue Management, Ridge Till (329C)
- Residue Management, Seasonal (344)
- Stripcropping (585)
- Waste Utilization (633)
- Windbreak/Shelterbelt Establishment (380)

Design criteria for individual components shall be according to standards in the Massachusetts Field Office Technical Guide and organic management criteria as approved by a USDA accredited National Organic Program certification agency.

OPERATION AND MAINTENANCE

The transition to organic production component of a conservation plan shall include appropriate operation and maintenance items for the client. These may include:

- Periodic plan review to determine if adjustments or modifications to the plan are needed.
- Maintain conservation practices identified in the plan in order to ensure continued effectiveness.
- Maintain all records applicable to the operation for not less than 5 years beyond their creation.

REFERENCES

- **NOFA-MASS** website, www.nofamass.org,
- **Organic Materials Review Institute,** www.omri.org, *(lists of allowed products)*
- **ATTRA** website, www.attra.org, *(information on crops, sustainable weed management, pest control, etc.)*
- **Soil Biology Primer**
  Soil and Water Conservation Society, www.swcs.org

- **Building Soils for Better Crops,**
  Fred Magdoff and Harold van Es,
  Sustainable Agriculture Network
  www.sare.org
- **University of Maine, Analytical Lab and Maine Soil Testing Service**
  Soil Testing Handbook—Appendix: General Organic.
  http://anlab.umesci.maine.edu/handbk/part0.htm